

Mooring line base design certificate TS CERT 7807 E

General information

Issue date:	09.07.2024	Expiry date:	08.07.2029
Line manufacturer	Wilhelmsen Ships Service	Independent inspection agency:	DNV
Line design designation:	Acera Amundsen SBA™, Acera Amundsen	Material type and grade:	HMPE Acera
Line construction:	12x1 – braided/plaited	Jacketed:	No
Design range:	16 mm – 64 mm	DNV Type Approval:	Yes

Base design performance indicators

Performance Indicators	Smallest Diameter				Largest Diameter			
	Design:	16mm	Measured:	18mm	Design:	64mm	Measured:	66mm
Diameter								
Line Design Break Force (LDBF)	23,4 t				270,7 t			
Line Linear Density (LLD) with SBA	0,166 kg/m				1,951 kg/m			
Load Bearing Linear Density (LBLD)	0,144 kg/m				1,862 kg/m			
Line Tenacity (LT) without SBA	162,9 t/kg/m				145,4 t/kg/m			
	D/d Ratio: 5				D/d Ratio:10			
Angled Break Force* (ABF) % Avg NSBF	188,06% / 94,03%				194,89% / 97,44%			
Angled Endurance* (AE)*** % Avg NSBF	86,85%				98,5%			
	-20 °C	0 °C	20 °C	40 °C	60 °C	80 °C		
Temperature (T)** % BF at 20°C (HMPE/PA)	115,3%/115%	108,4%/105%	100%/100%	97,5%/95%	87,2%/90%	61,5%/82%		
Axial Compression Resistance* (ACR)***	98,95%							
	%LDBF:10	%LDBF:20	%LDBF:30	%LDBF:40	%LDBF:50			
Average Immediate Strain* (e)	0,37%	0,64%	0,87%	1,09%	1,30%			

Splice type: Tension/Inside splice 2G

Maximum Line Tenacity: 162,9 t/kg/m

*Performance indicators are tested on samples: 16mm for Acera Amundsen mooring line

**Temperature indicator performed at yarn level

This MLBD Certificate is issued based on DNV Verification Statement no.: N142Y9YK, N142URZD, N142VA23, N142VHTJ, N142VHTM, N142VRRE, N142VHTR

Name and address of manufacturing facility:

Wilhelmsen Ships Service
TIMM SLOVAKIA s.r.o., Nozdrkovce 3140/37, 911 04 Trenčín,
Slovakia

Independent inspector:

Henrich Illáš

Completion date:

02.07.2024

Address of independent inspector:

DNV, Rolníckej Školy 1519, 94525 Komárno, Slovak Republic

Base design testing information

Name and address of test facility:

Wilhelmsen Ships Service
TIMM SLOVAKIA s.r.o., Nozdrkovce 3140/37, 911 04 Trenčín,
Slovakia

Independent inspector:

Henrich Illáš

Completion date:

02.07.2024

Address of independent inspector:

DNV, Rolníckej Školy 1519, 94525 Komárno, Slovak Republic

Base design sample and product documentation reviewed

Independent inspector: Henrich Illáš

Date of review:

09.07.2024

Base design sample manufacturing report Material test report

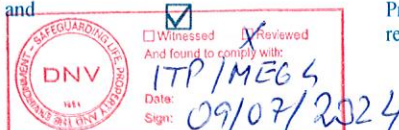
Base design sample manufacturing ITP Design specification

Base design sample test report Manufacturer's discard and inspection criteria

Splicing instructions

Jacketed line internal inspection report – N/A

Procedures for testing and inspection of retired mooring lines



Independent inspector, Date 09.07.2024